

## ***Binocular Use and Field Behavior Lesson Plan***

### **Goals:**

- Introduce students to the parts of binoculars
- Practice adjusting and focusing binoculars
- Instruction in and practice with how to locate birds w/binoculars
- Students participate in a controlled binocular use activity
- Students participate in bird watching on their playground w/binoculars using field behaviors determined by the group

### **Materials needed:**

- Binoculars (one pair for each student team of two)
- Several familiar tools (hammer, pliers, etc.)
- Typed instructions (14 pt. type) for transition from listening to doing during *Concept Development*
- Cookie recipe segments in plastic covers
- Sidewalk chalk and masking tape for marking *binocular focus areas*
- Push pins and masking tape for hanging recipe segments to outside surfaces
- Chocolate chip cookies (one for each student)

### **What to do:**

#### **INTRODUCTION/IDEAS EXPLORATION (5 minutes)**

- Recent bird watching highlights:
  - Steve: Peregrine falcon diving; northern flickers in pairing behavior; red-winged blackbirds setting up territories
  - Students: What have you been seeing?

#### **CONCEPT DEVELOPMENT (30 minutes)**

##### **Teaching (students listen): *Binocular Parts and How to Use Them***

- Show tools and discuss their appropriate uses and what their advantages are to the user.
- Display binoculars (discuss quality and respect)
  - What are they used for?
  - How should we treat them?
- Discuss parts of binoculars (eye pieces, magnifying lens, width adjustment, focus wheel, lens caps, neck strap)
  - Discuss lens care, keeping strap around the user's neck, etc. – RESPECT the tool!

- Demonstrate moving binoculars (keep your eye on the object and bring binoculars to your eyes) to find the bird or other item you are looking for.

**Activity (students practice): *Binocular Practice in the Classroom***

- Students should be placed in teams of two
- (list on board) Explain that teams are to practice wearing binoculars straps around their necks, adjusting for their eye width and focusing
- Pass out binoculars
- After five minutes or so of practice, place typed *Transition Instructions* on the far side of the room, have students focus, read and follow:

**Transition Instructions**

1. Read these instructions SILENTLY to yourself.
2. When you have finished reading the instructions, pass the binoculars to your partner if they have not read them.
3. With your partner, go get a piece of unused paper, a pencil, and something solid to write on (a clipboard or a book).
4. Sit together and wait silently for further instructions.

**Discussion (students make decisions): *Appropriate Field Behavior***

- Tell students that we are now going to go outside to use binoculars
- Brainstorm a list that will guide the group's field behavior (Things like: No running; fast movements are not helpful; whisper voices; ability to freeze movement; etc.)
- Have students make a commitment to abide by the guidelines

**APPLICATION (50 minutes)**

**Activities: *Using Binoculars***

**Part 1      Recipe Activity**

- Explain activity:
  - Each team will be collecting and recording the recipe for chocolate chip cookies;
  - Each team will move from place-to-place (point out locations), stand behind the line, use binoculars to read part of the recipe, write it down, go to the next place, etc.
  - When you have the complete recipe, report to me and receive your reward;
  - Do activity.